Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Withdrawn) A method of inhibiting morphogenesis of a pestivirus or a flavivirus comprising administering an effective amount of a nitrogen-containing virus-inhibiting compound, or a pharmaceutically acceptable salt thereof, to a cell or an individual infected with said virus, wherein said nitrogen-containing virus-inhibiting compound is comprised of an N-C_8-C_{16} alkyl group or an oxa-substituted derivative thereof with the proviso that said nitrogen-containing virus-inhibiting compound is not N-nonyl-1,5-deoxy-1,5-imino-D-glucitol (N-nonyl-DNJ).

2. (Withdrawn) The method of claim 1, wherein the nitrogen-containing virus-inhibiting compound includes an N-C_8-C_{10} alkyl group or an oxa-substituted derivative thereof.

3. (Withdrawn) The method of claim 2, wherein the nitrogen-containing virus-inhibiting compound is N-nonyl-1,5-dideoxy-1,5-imino-D-galactitol (N-nonyl DGJ) or N-nonyl-1,5,6-trideoxy-1,5-imino-D-galactitol (N-nonyl MeDGJ).

4. (Withdrawn) The method of claim 2, wherein the nitrogen-containing virus-inhibiting compound includes an N-oxa-nonyl group.

5. (Withdrawn) The method of any one of claims 1-4, wherein the nitrogen-containing virus-inhibiting compound is selected from the group consisting of N-alkylated piperidines, N-alkylated pyrrolidines, N-alkylated phenylamines, N-alkylated pyridines, N-alkylated pyrroles, N-alkylated amino acids, and oxa-substituted derivatives thereof.

6. (Withdrawn) The method of claim 5, wherein the nitrogen-containing virus-inhibiting compound is an N-alkylated piperidine, N-alkylated pyrrolidine, or oxa-substituted derivative thereof which is an imino sugar.

7. (Withdrawn) The method of any one of claims 1-4, wherein the nitrogen-containing virus-inhibiting compound has an IC_{50} of about 20 μM or less for inhibition of hepatitis B virus.

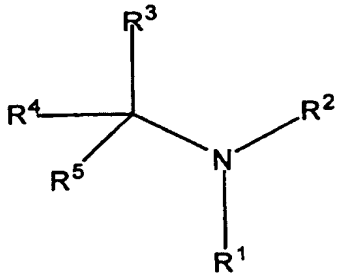
8. (Withdrawn) The method of any one of claims 1-4, wherein the nitrogen-containing virus-inhibiting compound has an IC_{50} of about 5 μM or less for inhibition of hepatitis B virus.

9. (Withdrawn) The method of any one of claims 1-4, wherein the nitrogen-containing virus-inhibiting compound has an IC_{50} of about 20 μM or less for inhibition of hepatitis B virus.

10. (Withdrawn) The method of any one of claims 1-4, wherein the nitrogen-containing virus-inhibiting compound has an IC_{50} of about 5 μM or less for inhibition of bovine viral diarrhea virus.

11. (Withdrawn) The method of any one of claims 1-10, wherein the nitrogen-containing virus-inhibiting compound does not inhibit α-glucosidase and ceramide glucosyl transferase as well as N-nonyl-DNJ.

12. (Withdrawn) The method of claim 1, wherein the nitrogen-containing virus-inhibiting compound has the formula:



wherein:

R^1 is a C_8-C_{16} alkyl or an oxa-substituted derivative thereof;

R^2 is hydrogen, R^3 is carboxy or a C_1-C_4 alkoxycarbonyl, or R^2 and R^3, together, are

$\begin{matrix} X & Y \\ \backslash & / \\ -(C)_n- \end{matrix}$ or $-(CXY)_n-$, wherein n is 3 or 4, each X, independently, is selected from the group consisting of hydrogen, hydroxy, amino, carboxy, C_1-C_4 alkylcarboxy, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_1-C_4 hydroxyalkyl, C_1-C_6 acyloxy, and aroyloxy, and each Y, independently, is selected from the group consisting of hydrogen, hydroxy, amino, carboxy, C_1-C_4 alkylcarboxy, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_1-C_4 hydroxyalkyl, C_1-C_6 acyloxy, aroyloxy, and deleted;

R^4 is hydrogen or deleted; and

R^5 is selected from the group consisting of hydrogen, hydroxy, amino, substituted amino, carboxy, alkoxycarbonyl, aminocarbonyl, alkyl, aryl, aralkyl, alkoxy, hydroxyalkyl, acyloxy, and aroyloxy, or R^3 and R^5, together, form a phenyl and R^4 is deleted; wherein when R^2 and R^3, together, are $-(CXY)_n-$ and R^4 is deleted, all Y are deleted, or a physiologically acceptable salt or solvate of said compound.

13. (Withdrawn) The method of claim 12, wherein R^1 is a C_8-C_{10} alkyl or an oxa-substituted derivative thereof.

14. (Withdrawn) The method of claim 13, wherein R^2 is hydrogen, R^3 is carboxy or C_1-C_4 alkoxycarbonyl, R^4 is hydrogen, and R^5 is selected from the group consisting of hydrogen, hydroxy, amino, substituted amino, carboxy, alkoxycarbonyl, aminocarbonyl, alkyl, aryl, aralkyl, alkoxy, hydroxyalkyl, acyloxy, and aroyloxy.

15. (Withdrawn) The method of claim 14, wherein R^3 is carboxy.

16. (Withdrawn) The method of claim 14, wherein R^3 and R^5, together, form a phenyl and R^4 is deleted.

17. (Withdrawn) The method of claim 12 or claim 13, wherein R^2 and R^3, together, are $-(CXY)_n-$, wherein n is 3 or 4, each X and each Y, independently, is selected from the group consisting of hydrogen, hydroxy, amino, carboxy, C_1-C_4 alkylcarboxy, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_1-C_4 hydroxyalkyl, C_1-C_6 acyloxy, and aroyloxy.

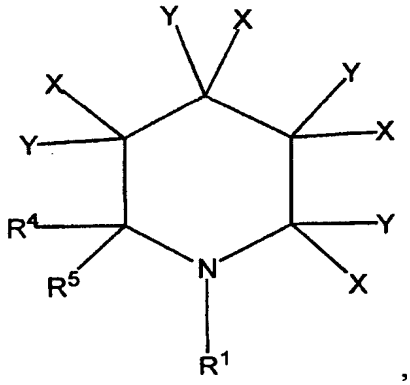
18. (Withdrawn) The method of claim 17, wherein each X is hydrogen and each Y, independently, is selected from the group consisting of hydroxy, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_1-C_4 hydroxyalkyl, C_1-C_6 acyloxy, and aroyloxy.

19. (Withdrawn) The method of claim 18, wherein R^4 is hydrogen and R^5 is hydrogen.

20. (Withdrawn) The method of claim 13, wherein R^4 is deleted and R^2 and R^3, together, are $-(CXY)_n-$, wherein n is 3 or 4, each Y is deleted, and each X, independently, is selected from the group consisting of hydrogen, hydroxy, amino, carboxy, C_1-C_4 alkylcarboxy, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_1-C_4 hydroxyalkyl, C_1-C_6 acyloxy, and aroyloxy.

21. (Withdrawn) The method of claim 13, wherein each X, independently, is selected from the group consisting of hydrogen, hydroxy, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_1-C_4 hydroxyalkyl, C_1-C_6 acyloxy, and aroyloxy.

22. (Withdrawn) The method of claim 12, wherein the nitrogen-containing virus-inhibiting compound has the formula:



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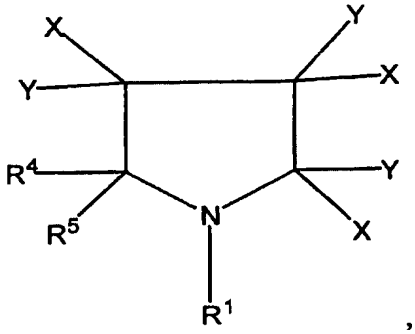

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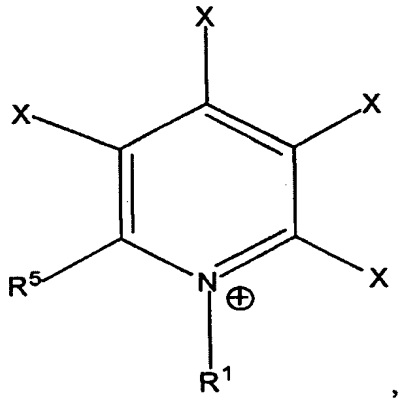

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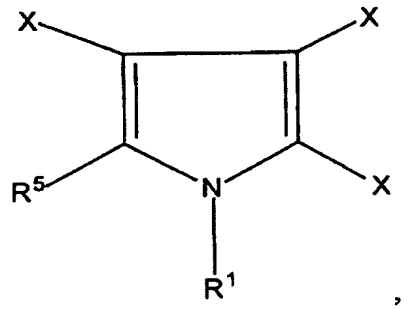

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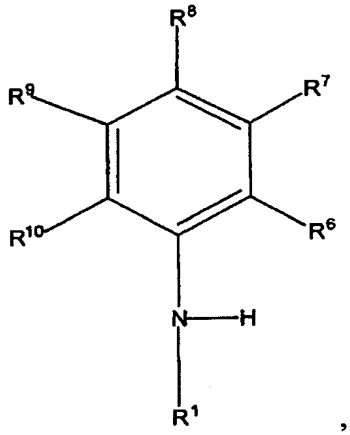

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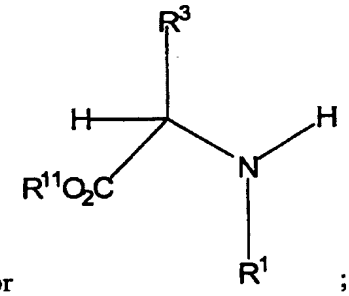
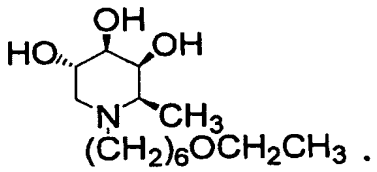


;

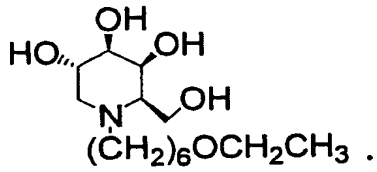
wherein each of R^6-R^{10}, independently, is selected from the group consisting of hydrogen, hydroxy, amino, carboxy, C_1-C_4 alkylcarboxy, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_1-C_4 hydroxyalkyl, C_1-C_4 acyloxy, and aroyloxy; and R^{11} is hydrogen or C_1-C_6 alkyl.

23. (Withdrawn) The method of claim 1, wherein the nitrogen-containing virus-inhibiting compound is selected from the group consisting of N-nonyl altrostatin, N-nonyl-*2R,5R*-dihydroxymethyl-*3R,4R*-dihydroxypyrrolidine (N-nonyl DMDP), and N-nonyl-2-aminobenzamide (2ABC9).

24. (Withdrawn) The method of claim 1, wherein the nitrogen-containing virus-inhibiting compound is N-(7-oxa-nonyl)-1,5,6-trideoxy-1,5-imino-D-galactitol (N-7-oxa-nonyl MeDGJ)



25. (Withdrawn) The method of claim 1, wherein the nitrogen-containing virus-inhibiting compound is N-(7-oxa-nonyl)-1,5-dideoxy-1,5-imino-D-galactitol (N-7-oxa-nonyl DGJ)



26. (Withdrawn) The method of any one of claims 1-25, wherein a mammalian cell is treated.

27. (Withdrawn) The method of any one of claims 1-25, wherein a human cell is treated.

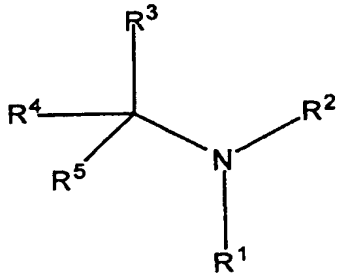
28. (Withdrawn) The method of any one of claims 1-25, wherein a mammal is treated.

29. (Withdrawn) The method of any one of claims 1-25, wherein a human is treated.

30. (Withdrawn) The method of any one of claims 1-25, wherein the virus is a hepatitis B virus.

31. (Withdrawn) The method of any one of claims 1-25, wherein the virus is a hepatitis C virus.

32. (Currently Amended) A compound having the formula ~~shown in claim 12~~



wherein:

R^1 is a C_8-C_{16} alkyl or an oxa-substituted derivative thereof;

R^2 is hydrogen, R^3 is carboxy or a C_1-C_4 alkoxycarbonyl, or R^2 and R^3, together, are

$-(C)_n-$ or $-(CXY)_n-$, wherein n is 3 or 4, each X, independently, is selected from the group consisting of hydrogen, hydroxy, amino, carboxy, C_1-C_4 alkylcarboxy, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_1-C_4 hydroxyalkyl, C_1-C_6 acyloxy, and aroyloxy, and each Y, independently, is selected from the group consisting of hydrogen, hydroxy, amino, carboxy, C_1-C_4 alkylcarboxy, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_1-C_4 hydroxyalkyl, C_1-C_6 acyloxy, aroyloxy, and deleted;

R^4 is hydrogen or deleted; and

R^5 is selected from the group consisting of hydrogen, hydroxy, amino, substituted amino, carboxy, alkoxycarbonyl, aminocarbonyl, alkyl, aryl, aralkyl, alkoxy, hydroxyalkyl, acyloxy, and aroyloxy, or R^3 and R^5, together, form a phenyl and R^4 is deleted; wherein when R^2 and R^3, together, are $-(CXY)_n-$ and R^4 is deleted, all Y are deleted,

wherein said compound is N-alkylated 1-methyl-deoxygalactonojirimycin (MeDGJ) or an oxa-substituted derivative thereof, or a physiologically acceptable salt or solvate of said compound.

33. (Currently Amended) The compound of claim 32, wherein the compound is ~~selected from the group consisting of N-nonyl-1,5-dideoxy-1,5-imino-D-galactitol (N-nonyl DGJ)~~ N-nonyl-1,5,6-trideoxy-1,5-imino-D-galactitol (N-nonyl MeDGJ), ~~and~~ or physiologically acceptable salts or solvates thereof.

34. (Withdrawn-Currently Amended) ~~The~~ A compound ~~of claim 32, wherein the compound is~~ selected from the group consisting of N-nonyl altrostatin, N-nonyl DMDP, N-nonyl-2-aminobenzamide, and physiologically acceptable salts or solvates thereof.

35. (Currently Amended) The compound of claim 32, wherein the compound is ~~selected from the group consisting of~~ N-(7-oxa-nonyl)-1,5,6-trideoxy-1,5-imino-D-galactitol (N-7-oxa-nonyl MeDGJ), ~~N-(7-oxa-nonyl)-1,5-dideoxy-1,5-imino-D-galactitol (N-7-oxa-nonyl DGJ), and~~ or physiologically acceptable salts or solvates thereof.

36. (Withdrawn) A pharmaceutical composition comprising a nitrogen-containing virus-inhibiting compound and a pharmaceutically acceptable carrier, wherein the nitrogen-containing virus inhibiting compound includes an N-C_8-C_{16} alkyl group.

37. (Withdrawn) A method of manufacturing a pharmaceutical composition comprising combining a nitrogen-containing virus-inhibiting compound with a pharmaceutically acceptable carrier, wherein the nitrogen-containing virus inhibiting compound includes an N-C_8-C_{16} alkyl group.